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EXAMINER	
DINH, MINH	
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	09/955,945	KAMIWADA ET AL.	
	Examiner	Art Unit	
	Minh Dinh	2132	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *26 October 2007*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-9 and 11-25* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☒ Claim(s) *11-17* is/are allowed.

6)☒ Claim(s) *1-9 and 18-25* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *20 September 2001* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Response to Amendment

1. This action is in response to the amendment filed 10/26/07. Claims 1, 11, 23 and 25 have been amended.

Response to Arguments

2. Applicant's arguments, see the 7th paragraph of page 13, filed 10/26/07, with respect to the rejection of claim 11 under 35 USC 102(b) as being anticipated by Holmes (5,875,395) have been fully considered and are persuasive. The rejection of claim 11 under 35 USC 102(b) has been withdrawn.

3. Applicant's arguments, see the 7th paragraph of page 13, filed 10/26/07, with respect to the rejection of claim 1 under 35 USC 102(b) as being anticipated by Holmes have been fully considered but are not persuasive. Applicant's amendments have necessitated a new search and new grounds of rejection.

4. Applicant's arguments filed 10/26/07 with respect to the rejection of claim 18 under 35 USC 103(a) have been fully considered but they are not persuasive. Applicant argues that the Examiner's interpretation that Holmes'

teaching of a terminal is a "mobile phone" is not supported and is incorrect (page 13, 3rd paragraph). Applicant's arguments fail to comply with 37 CFR 1.111(b) because they amount to a general allegation that the claims define a patentable invention without specifically pointing out how the language of the claims patentably distinguishes them from the references.

5. Applicant's arguments with respect to the rejection of claim 22 under 35 USC 102(b) as being anticipated by Holmes have been fully considered but they are not persuasive.

Applicant argues that Holmes does not teach a "single operating terminal directly controlling one or more devices with signals transmitted from said terminal" because Holmes' terminal does not transmit signals directly to the devices (page 11, top half).

First, the feature that Applicant relies upon (i.e., transmitting signals directly to the devices) is not recited in the rejected claim. Although the claim is interpreted in light of the specification, limitations from the specification are not read into the claim.

Second, the specification discloses that the terminal is configured to either (i) transmit instruction information to the home server, which enforces access control; or (ii) transmit instruction information to a home device, which in turns sends the information to the home server for

enforcing access control (page 14, lines 21-23; page 18, lines 16-17; page 23, lines 9-12; page 27, lines 10-20). In either case, it is the home server, not the terminal, that directly controls the device by transmitting a signal to the device, i.e., sends a signal to the device and the device acts on the received signal without sending the received signal to another entity. Based on the specification, the claimed limitation "said single operating terminal directly controlling said one or more devices with signals transmitted from said terminal" is interpreted as "said single operating terminal controlling said one or more devices with signals transmitted from said terminal".

Applicant also argues that the Office Action is incomplete because the Examiner does not discuss the feature mentioned above and does not provide citations in Holmes as where such a disclosure is found (page 9, 5th paragraph). Claims 1 and 22 are similar except for the last limitation. The last limitation of claim 22 was addressed in page 6, 2nd paragraph of the previous Office Action ("Regarding claim 22, Holmes teaches that the operating terminal controls said one or more devices by sending out commands to the one or more devices; the teaching meets the limitation of the operating terminal directly controlling said one or more devices with signals transmitted from said terminal.") Holmes' teaching that the operating terminal controls said one or more devices by sending out commands to the one or more devices has already been discussed in the rejections of claims 1

and 11 in the page 5 of the previous Office Action. Accordingly, Applicant's request that the Examiner provide a non-final Office Action with the response date reset is denied.

6. Applicant's arguments, see the 7th paragraph of page 13, filed 10/26/07, with respect to the rejection of claim 23 under 35 USC 102(b) as being anticipated by Holmes have been fully considered but are not persuasive. The of scope of claim 23 is not limited by the amended language that suggests optional but does not require steps to be performed, i.e., a single remote control unit **capable of** transmitting instruction signals directly from the single remote control unit to each of said plurality of devices (lines 4-5), because the specification discloses that the single operating terminal sends instruction information directly to each device **or** to the home server (page 19, lines 10-12).

7. Applicant's arguments with respect to the rejection of claim 25 under 35 USC 102(b) as being anticipated by Holmes have been fully considered but they are not persuasive. Applicant argues that the Examiner's assertion that a terminal is a "mobile phone" is not supported and is incorrect. Applicant reasons that Holmes discusses a user at a mobile station and a user, and, therefore, Holmes does not disclose a handset (page 12, top

half). First, the claim language does not exclude a handset from being controlled by a user. Second, merely because Holmes' mobile station is controlled by a user does not take away the fact that the mobile station is a handset. Third, the handset capable of transmitting instruction signals to the home server disclosed in the instant application is also controlled by a user.

Claim Rejections - 35 USC § 102

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

9. Claims 1 and 8-9 are rejected under 35 U.S.C. 102(e) as being anticipated by Moyer et al. (US 2002/0103898).

Regarding claims 1 and 8-9, Moyer discloses a method for controlling a plurality of home devices, i.e., IP-capable networked appliances (fig. 2, element 202) in a home network using a single operating terminal, i.e., an application client (fig. 2, element 100), the method comprising: accepting instruction information (i.e., a SIP message) including the identifier of the operating terminal and said instruction signals relating to operation of said plurality of devices (paragraph 0073); determining said operating terminal access right based on said operating terminal identifier included in said instruction information (i.e., authenticating the application client by a firewall) (paragraph 0073); and controlling said plurality of devices based on said operating terminal access right and said instruction signal (i.e., allowing the message to go through the firewall to reach the IP-capable networked appliances, which process the message by themselves) (paragraph 0073). Since Moyer discloses that (i) the architecture of figure 2 allows the application client to directly connect to and interact with the devices; and (ii) the SIP message is transmitted from application client, goes through the firewall and reaches the devices without being modified or transformed (paragraph 0073), the Moyer message is considered being transmitted directly from the terminal to the device.

Moyer does not explicitly disclose the step of accepting registration of terminal information for associating a unique identifier established for said

operating terminal with said operating terminal access right for accessing the one or more devices. However, this feature is deemed to be inherent to the Moyer method as paragraph 0073 shows that a firewall uses stored information to authenticate and authorize the operating terminal. The Moyer method would be inoperative if the firewall did not accept registration of terminal information for associating a unique identifier established for said operating terminal with said operating terminal access right.

10. Claims 22-23 and 25 are rejected under 35 U.S.C. 102(b) as being anticipated by Holmes (5,875,395).

Regarding claim 22, Holmes discloses an access restriction method for a device control system comprising a device control server interconnected over a CEBus home network with a plurality of different types of devices within a home (fig. 1, elements 12, 26 and corresponding text; col. 3, lines 38-50), and an operating terminal capable of transmission of instruction signals to said devices, the instruction signals relating to operation of plurality of devices connected to the CEBus home network (fig. 1, elements 10, 24), said method comprising: accepting instruction information including an identifier of the operating terminal and said instruction signals relating to operation of said plurality of devices (fig. 5, step 52); determining said operating terminal access right based on said operating terminal identifier

included in said instruction information (fig. 5, step 54); and controlling one or more of said plurality of devices by said operating terminal based on said operating terminal access right (fig. 5, steps 56-62). Holmes teaches that the operating terminal controls said one or more devices by sending out commands to the one or more devices; the teaching meets the limitation of the operating terminal directly controlling said one or more devices with signals transmitted from said terminal.

Holmes does not explicitly disclose the step of accepting registration of terminal information for associating a unique identifier established for said operating terminal with said operating terminal access right for accessing the one or more devices. However, this feature is deemed to be inherent to the Holmes method as lines 1-17 of column 3 show that the device control server uses stored information to authenticate and authorize the operating terminal. The Holmes method would be inoperative if the server did not accept registration of terminal information for associating a unique identifier established for said operating terminal with said operating terminal access right.

Regarding claim 23, Holmes discloses a home network system comprising a device control server interconnected over a CEBus home network with a plurality of different types of devices within a home (fig. 1, elements 12, 26 and corresponding text; col. 3, lines 38-50), and a single

remote control unit that transmits instruction signals to said devices, the instruction signals relating to operation of plurality of devices connected to the CEBus home network (fig. 1, elements 10, 24). The of scope of claim 23 is not limited by the language that suggests optional but does not require an action to be performed, i.e., a single remote control unit **capable of** transmitting instruction signals directly from the single remote control unit to each of said plurality of devices (lines 4-5), because the specification discloses that the single operating terminal sends instruction information directly to each device **or** to the home server (page 19, lines 10-12).

Regarding claim 25, Holmes discloses an access restriction method for a device control system comprising a device control server interconnected over a CEBus home network with a plurality of different types of devices within a home (fig. 1, elements 12, 26 and corresponding text; col. 3, lines 38-50), and an operating terminal capable of transmission of instruction signals to said devices, the instruction signals relating to operation of plurality of devices connected to the CEBus home network (fig. 1, elements 10, 24), said method comprising: accepting instruction information including said operating terminal identifier and said instruction signals relating to operation of said plurality of devices (fig. 5, step 52); determining said operating terminal access right based on said operating terminal identifier included in said instruction information (fig. 5, step 54); and controlling said

plurality of devices based on said operating terminal access right and said signal instructions, directly received from said operating terminal, relating to said plurality of different types of devices (fig. 5, steps 58-66). Holmes does not explicitly disclose the step of accepting registration of terminal information for associating a unique identifier established for said operating terminal with said operating terminal access right for accessing the one or more devices. However, this feature is deemed to be inherent to the Holmes method as lines 1-17 of column 3 show that the device control server uses stored information to authenticate and authorize the operating terminal. The Holmes method would be inoperative if the server did not accept registration of terminal information for associating a unique identifier established for said operating terminal with said operating terminal access right. Holmes's single operating terminal is also a handset positioned outside of the home (i.e., a mobile station) (fig. 1, element 10).

Claim Rejections - 35 USC § 103

11. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

12. Claims 2-3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Moyer as applied to claim 1 above, and further in view of Buffam (6,185,316). Moyer does not teach using a challenge-response scheme based on a public-key cryptography. Buffam discloses using a challenge-response scheme based on a public-key cryptography and that the public key is part of the identity of an entity and should be made known to other entities (col. 5, lines 45-54; col. 6, lines 18-29). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the Moyer method to use a challenge-response scheme based on a public-key cryptography, as taught by Buffam. The motivation for doing so would have been that no secret information had to be shared by the entities involved in the exchange. Accordingly, the server receives the public key of the terminal as part of the registration information.

13. Claims 4-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Moyer as applied to claim 1, and further in view of Sizer, II et al (6,021,324). Moyer discloses verifying the terminal's access right when receiving instruction information from the terminal. Moyer does not disclose a server connected to an external network from which electronic information is acquired and that the information is stored at the server and then presented. Sizer discloses a system for controlling appliances within a home

including a control server, the server is connected to an external network from which electronic information is acquired and that the information is stored at the server and then presented (col. 2, lines 30-42; col. 6, lines 21-28). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the Moyer method such to user a server connected to an external network from which electronic information is acquired and that the information is stored at the server and then presented, as taught by Sizer. The motivation for doing so would have been that electronic content could be downloaded from a cable company for use at the premises. Accordingly, access to the external server and the electronic information is control by access right of the terminal.

14. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Moyer as applied to claim 1 above, and further in view of Muhonen (6,751,472). Moyer does not disclose that the access right of the operating terminal is determined based on whether the operating terminal is located inside or outside the house. Muhonen discloses that different access rights are applied depending on the location of a mobile terminal whether it is located inside a house (col. 5, lines 33-51). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the Moyer method such that the access right of the operating terminal is

determined based on whether the operating terminal is located inside or outside the house, as taught by Muhonen. The motivation for doing so would have been to extend the capabilities of the operator to offer different services depending on the location of the subscriber.

15. Claims 18 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Holmes in view of Yatsukawa (6,148,404) and White et al. (6,353,413).

Holmes discloses an operating terminal, in a device control system having a device control server interconnected over a home network with one or more devices within the home network, capable of transmitting instruction signals relating to operations of said one or more devices to said one or more devices (fig. 1, elements 10, 12, 26), comprising: identifier storage means storing a unique identifier (col. 1, lines 56-58); input acceptance means for accepting input of instructions relating to operation of said one or more devices (fig. 1, element 10); instruction information generation means for generating instruction information based on inputted instructions accepted by said input acceptance means and on an identifier stored in said identifier storage means; and instruction information transmission means for transmission of instruction information generated by said instruction information generation means (fig. 5, step 52-58). Holmes

further discloses using a challenge-response scheme based on symmetric-key cryptography between the server and the operating terminal (col. 1, lines 50-67).

Holmes does not teach using a challenge-response scheme based on a public-key cryptography. Yatsukawa discloses using a challenge-response scheme based on a public-key cryptography, in which a terminal first registers its identifier and public key with a server, encrypts a predetermined value with its private key and sends the encrypted value to the server for authentication (figures 13-14; col. 20, lines 39-55). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the Holmes method to use a challenge-response scheme based on a public-key cryptography, in which a terminal first registers its identifier and public key with a server, encrypts a predetermined value with its private key and sends the encrypted value to the server for authentication, as taught by Yatsukawa. The use of public-key cryptography is indispensable to satisfy all conditions of a digital signature (col. 3, line 66 – col. 4, line 11).

Holmes does not disclose that the terminal, i.e., a mobile phone, can transmit instruction information directly to the home devices. White disclose a terminal being both a mobile phone and a remote control unit transmitting instruction information directly to home devices (Abstract; figures 1-2; col. 3, lines 23-34). It would have been obvious to one of ordinary skill in the

art at the time the invention was made to modify Holmes's terminal such that it transmits instruction information directly to the home devices, as taught by White. The motivation for doing so would have been to reduce the number of portable devices in a home (col. 1, lines 46-52).

16. Claim 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over Holmes in view of Yatsukawa and White as applied to claim 18 above, and further in view of Muhonen. Holmes discloses generating instruction information based on said inputted instruction and said identifier (fig. 5). Holmes does not disclose using location information. Muhonen discloses that different services are offered depending on the location of a mobile terminal (col. 5, lines 33-51). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the Holmes terminal to use its location information, as taught by Muhonen. The motivation for doing so would have been to extend the capabilities of the operator to offer different services depending on the location of the subscriber.

17. Claim 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over Holmes in view of Yatsukawa as applied to claim 18 above, and further in view of Dugan. Holmes discloses using the terminal identifier to authenticate the terminal. Holmes does not disclose using a user's

information to authenticate the user of the terminal. Dugan discloses authenticating the terminal and authenticating the user of the terminal using a user's information (col. 67, lines 49-54). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the Holmes method to also authenticate a user of the terminal using the user's information, as taught by Dugan. The motivation for doing so would have been that only authorized users are allowed to operate the terminal.

18. Claim 24 is rejected under 35 U.S.C. 103(a) as being unpatentable over Holmes as applied to claim 23 above, and further in view of Davidson ("CEBus: A New Standard in Home Automation"). Holmes discloses that one of the devices is a cooling system (col. 3, lines 24-29). Holmes does not disclose that the devices include a TV set. Davidson discloses that devices in a home automation system include a TV set (see CEBUS, pages 40-41; A CEBus Demonstration, pages 50-51). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the Holmes system to such that it includes a TV set, as taught by Davidson. The motivation for doing so would have been to provide remote control of the TV set together with other household devices using a single standard.

Allowable Subject Matter

19. Claims 11-17 are allowable over the prior art of record.

20. The following is a statement of reasons for the indication of allowable subject matter. The present invention is directed to a method and system for access control in a home network comprising a device control server, a plurality of home devices, and a single operating terminal for sending instructions relating to the operation of the devices. More specifically, independent claim 11, which is directed to the control server, identifies the uniquely distinct feature: device control means controlling said one or more devices based on the access right of said single operating terminal as determined by said access right determination means and on instruction signals transmitted directly from said single operating terminal to said one or more devices included in said instruction information. The closest prior art, Holmes (5,875,395), discloses a similar method and system for access control in a home network. However, Holmes does not teach that the instruction signals, i.e., commands, are transmitted directly from the operating terminal to the devices. Instead, Holmes' commands are received and translated by the control server, which then transmits the translated commands to the devices. Another prior art, Moyer et al. (US 2002/0103898), discloses that a server (i.e., a residential gateway) allows SIP instructions transmitted from an operating terminal to reach IP-capable

devices; however, Moyer's server does not control the devices. The prior art, taken either singly or in combination, fails to anticipate or fairly suggest the limitations of applicant's independent claim, in such a manner that a rejection under 35 U.S.C 102 or 103 would be proper. The claimed invention is therefore considered to be in condition for allowance as being novel and nonobvious over prior art.

Conclusion

21. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

U.S. Patent No. 6,564,056 to Fitzgerald

U.S. Patent App. Publication No. 2007/0296552 to Huang et al.

22. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-

MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Minh Dinh whose telephone number is 571-272-3802. The examiner can normally be reached on Mon-Fri: 10:00am-6:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gilberto Barron can be reached on 571-272-3799. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to

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or 571-272-1000.

/MD/
Minh Dinh
Examiner
Art Unit 2132

01/21/08

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